## Montana DEQ Forest Fire Smoke Advisory August 24, 2007

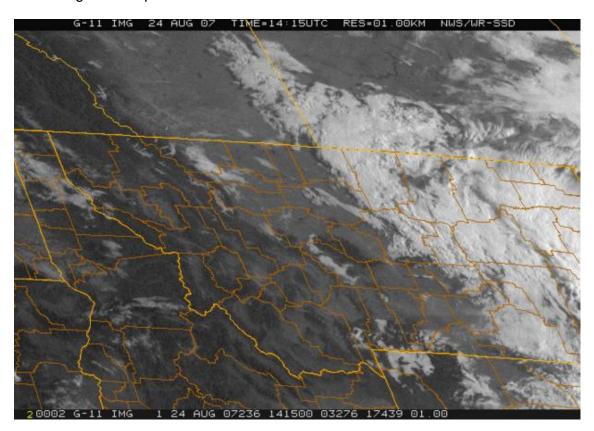
10:00 AM Friday

## **FORECAST:**

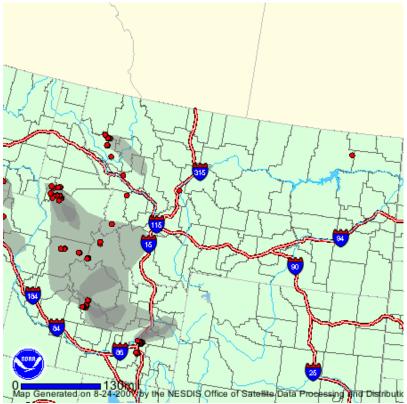
There is a layer of smoke aloft hanging over western Montana but the surface concentrations are no worse than moderate. The rest of the state is seeing blue sky again this morning.

Temperatures will rise over the next couple of days as a ridge builds into Montana. Strong gusty winds are expected to increase smoke production and produce some direct plume impacts locally but the dispersion will remain excellent today and no widespread stagnation episodes are expected. Overall transport winds will be from the west-northwest today and this will bring smoke into the southern Bitterroot, Butte and Dillon areas later this afternoon. Expect the general haze level to continue to rise over the next two days. Direct plume impacts from local fires could be a problem this afternoon and evening. Residents near active fires or experiencing noticeable smoke levels should use the <a href="VISIBILITY GUIDELINES">VISIBILITY GUIDELINES</a> to determine smoke levels in their area and guide their activity decisions.

A morning satellite photo centered on Great Falls is illustrated below:



This morning's analysis from NOAA's satellite services division shows the active fires in Montana and the smoke plumes combining and spreading downwind (the analyzed smoke is based on yesterday's satellite coverage, the fire detects are based on last nights satellite coverage).



Red indicates hot spot detected. Grey represents smoke seen by satellite. Fire size is exaggerated for visibility at this scale

To identify individual fires on graphic above go here: <a href="http://activefiremaps.fs.fed.us/lg\_fire2.php">http://activefiremaps.fs.fed.us/lg\_fire2.php</a>

This morning's smoke report is below, comparing particulate levels where we have information to MDEQ's Forest Fire health advisory levels. http://www.deq.state.mt.us/FireUpdates/SmokeCategories.asp

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10:00 AM Friday DISCUSSION:

Smoke can be seen in the Seeley Lake area on this morning's satellite photo. The smoke from recent fire activity is mostly aloft but <u>moderate</u> smoke levels are currently impacting Whitefish, Kalispell, Missoula, and Hamilton. Conditions there are expected to get worse for few hours this morning before improving this afternoon. All the rest of the reporting stations are at <u>good</u> this morning. The advisories in the table below represent conditions between midnight and 8 AM and may change substantially through the day. Residents downwind of the active fires and experiencing impacts from residual smoke will need to pay close attention to conditions in their area and use the <u>visibility guidelines</u> to determine current conditions.

John Coefield
Meteorologist
Montana Department of Environmental Quality

Locations and severity of forest fire smoke reports since midnight of the date above at reporting stations.

Real time particulate information is currently available in most of the larger urban areas from several different sources including: DEQ run PM-10 BAMS and PM2.5 BAMS, CS&KT run PM-10 TEOMS, NWS ASOS visibility monitors, and USFS remote access Nephelometers and BAMS.

## Updated 10 AM August 24, 2007

These advisories represent conditions between midnight and 8 AM and may change substantially through the day

substantially tillough the day	
HAZARDOUS	
VERY UNHEALTHY	
<u>UNHEALTHY</u>	
<u>UNHEALTHY</u>	
FOR SENSITIVE GROUPS	
<u>MODERATE</u>	WhitefishT24
	Kalispell T24
	Missoula T24
	Hamilton T24

T1(x) One-hour TEOM or BAM value (number of values)
T8(x) Eight-hour average TEOM or BAM value(number of values)

T24 24 hour average TEOM or BAM value

Vis(x) Visibility value(number of hours)

Vis(am/pm) Visibility value from twice/day reporting stations

(est) estimate

Local impacts in areas immediately adjacent to active fires are expected to exceed some or all of the advisory levels. DEQ recommends the use of local <u>visibility guidelines</u> to evaluate possible health risks and make informed activity decisions.